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COLLABORATION: AN EXAMINATION OF
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INFORMATION TECHNOLOGY FACILITATING INTERORGANIZATIONAL LEARNING IN AN IT OUTSOURCING COLLABORATION: AN EXAMINATION OF TRANSPARENCY AND RECEPTIVITY

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Abstract

This proposal outlines a study to further develop theory related to interorganizational learning by exploring how the use of IT in an alliance will impact the ability of each partner in the relationship to learn. The study aims to do this by examining how the use of IT impacts an organization's degree of transparency and its degree of receptivity (two key enablers of interorganizational learning). The research will also explore how the ability of the partners to learn impacts the amount of learning derived from the alliance, as well as the impact that the intent of the partners has on the ability to learn.

Keywords: Interorganizational learning, collaboration, organizational learning, transparency, receptivity

Introduction

Individuals learn from each other and in a similar fashion, it is thought that organizations learn from one another too. The learning that takes place between organizations is referred to as interorganizational learning (IOL). Interorganizational learning is especially likely in today's organizational climate where collaborative arrangements are becoming more commonplace. Despite the fact that these relationships can be found occurring across all organizations in both the public and private sector, few researchers have delved into them to identify what enables effective interorganizational learning.

Collaborative relationships are particularly important in the field of "information technology" (IT), where increasingly services are being provided by one organization to another, by companies that specialize in these practices. A good example is a recently created relationship between a private university and an IT outsourcer (hereafter referred to as "Company A") who provides IT services and management. As a result of this collaboration, the university is hoping to gain better management of its information technology and services and to perhaps learn how to use IT more effectively. Company A on the other hand, hopes to benefit from the relationship by learning how to more effectively manage IT resources and will gain knowledge that can be used to enhance its offerings to existing and new collaborators.

The relationship between the university and Company A, is just one of many types of collaborations which are becoming progressively important because organizations are operating in an environment that is different from the past. Today's environment differs primarily because of the rate at which change is occurring (Alavi 2000). Many organizations are finding that with rapid changes in economic activity, technology and globalization, they have to compete to capture world markets, and constantly try to find new opportunities and solutions to keep and acquire new customers (Doz and Hamel 1998).¹

¹Today, both for-profit and not-for-profit organizations realize that they are in the business of serving customers.

The new climate brings about problems and opportunities that organizations have to frequently and quickly respond and react to (Turban et al. 2001). Many of the opportunities that surface call for skills and resources very few organizations possess entirely and they find themselves having to form collaborative relationships in order to cope. Examples of these collaborations include: buyers and suppliers involved in the production of goods; joint product developments; arrangements for the transfer of knowledge (Grant and Baden-Fuller 1995) and also for the implementation of IT. There are numerous collaborations that do not produce a specific product and these relationships need to be examined.

IT is a primary tool used in many collaborative arrangements because it provides the solutions for bridging the resources of the organizations. Some of the information technologies used in these relationships include: the Internet, shared databases, voicemail, facsimiles and videoconferencing. The technologies can be classified into three main groups: collaborative, monitoring and modeling technologies (Scott 2000). Since IT plays an important role within these relationships there is a need for further understanding of that role, specifically how it affects interorganizational learning.

Background

A recent study showing that IT facilitated interorganizational learning took place in the disk drive industry where trust and collaboration existed because the partners were working together to produce a specific product (Scott 2000). The interorganizational learning that occurred was described as lower-level learning and higher-level learning. Lower-level learning is described as the learning that results from “repetition and routine and involves association building” (Fiol and Lyles 1985; Lyles 1998) and deals with explicit knowledge, and higher-level learning is categorized as learning that results from changes in beliefs, assumptions, overall missions and norms and is more concerned with tacit knowledge (Fiol and Lyles 1985).

The study identified a number of other enablers that affect interorganizational learning but have not yet been explored. Two key variables identified but not examined are transparency and receptivity. Transparency is the level of openness of a firm to its partner and the opportunity that it provides to its partner to learn (Doz and Hamel 1998; Hamel 1991). A firm can become more transparent to its partner when it provides the partner access to resources within its organization. This can include access to people, documentation and the organization’s partners. Receptivity is the capacity or ability of the collaborating partners to absorb the knowledge provided by one another (Doz and Hamel 1998; Hamel 1991). Organizations that have specific learning goals for a collaborative relationship would be considered to be receptive. Receptivity in a relationship can also be identified by a partner providing multiple channels for information to be taken into the organization (e.g., email, voicemail).

The aim of the proposed dissertation is to further develop theory related to interorganizational learning, by examining organizational transparency and receptivity and how these are facilitated by IT within the context of relationships involving collaboration for the outsourcing of IT management. The proposed dissertation will build on Scott’s theory of how IT facilitates interorganizational learning (Scott 2000). Other variables identified from the research literature which will be investigated because of their potential to impact the levels of interorganizational learning through interactions with effects on transparency and receptivity are: intent, absorptive capacity and relative absorptive capacity. *Intent* is the purpose or aim of the partners, in terms of learning, and it can be expressed verbally or in writing (e.g., in a contract) (Doz and Hamel 1998; Hamel 1991); *absorptive capacity* addresses whether the partners have an ability to recognize new information or knowledge from the collaboration and are able to incorporate it into the organization, and the amount of effort they put into it (Cohen and Levinthal 1990); and *relative absorptive capacity* looks at whether the firms are similar in their industries, compensation policies and organizational structures (Lane and Lubatkin 1998).

The propositions to be examined in the study are as follows:

- Proposition 1: The use of IT in facilitating an alliance will impact the ability to learn (i.e., degree of transparency and degree of receptivity) of each partner in the relationship.
- Proposition 2: The ability to learn of each partner in an alliance will impact the amount of inter-organizational learning derived from the alliance.
- Proposition 3: An organization’s intent to learn in an alliance should increase its ability to learn and increase the level of interorganizational learning in the relationship.
- Proposition 4: If the use of IT in a partnership increases an organization’s ability to learn, the degree of the interorganizational learning should be increased by the levels of absorptive capacity and relative absorptive capacity of the partners.

A conceptual framework developed from the literature that will be used to guide the study in order to validate the propositions is shown in Figure 1.

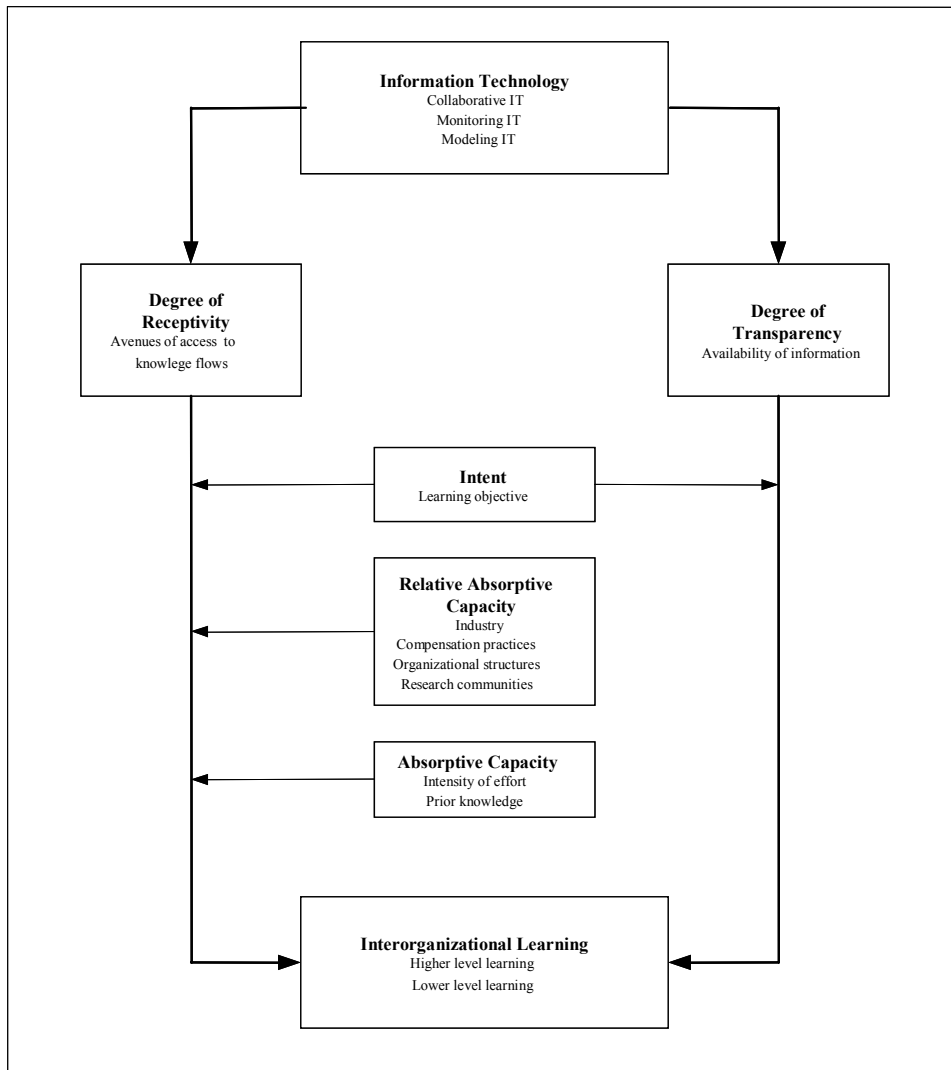


Figure 1. Conceptual Framework for IT Facilitation of IOL with Transparency and Receptivity

The conceptual framework portrays the relationship between IOL and IT as being facilitated by the degrees of an organization’s receptivity and transparency, which are proposed to be enablers of the IOL process (Hamel 1991; Scott 2000). The framework shows that the intentions of the organizations in the partnership may influence an organization’s degree of transparency and receptivity, and as a result the level of IOL, as firms increase or decrease these factors based on their learning objectives (Hamel 1991).

Absorptive capacity is shown to have the potential to impact the relationship between the degree of receptivity and the final outcome of the level of IOL because it relates to the intensity of effort applied by an organization in the learning process and also incorporates into the process any prior knowledge, which may have been accumulated beforehand (Cohen and Levinthal 1990).

Finally, the framework shows that the relative absorptive capacity of an organization has the potential to influence the relationship between the degree of an organization’s receptivity and the level of IOL because of the belief that organizations with similar structures and logics will have a higher capacity to recognize and absorb new information, than those with differing structures (Lane and Lubatkin 1998).

Research Methodology

The proposed research will use a case study methodology to collect and analyze both quantitative and qualitative data. A number of cases involving Company A and some of its clients (partners) will constitute the research sample. The client relationships range from several months to over a decade in length. Company A is being selected for the proposed study because of its willingness to participate and to provide access to its resources and clients. More importantly, Company A provides the ability to study an IT collaborative relationship.

The case study design is appropriate for the study because it is an inquiry that allows a phenomenon (interorganizational learning) to be examined in the real life context of the relationships (between Company A and its clients) (Yin 1994). Additionally, the case study provides the ability to perform the investigation where the boundaries are not clearly evident (Yin 1994). This is the case for almost all collaborations.

The main unit of analysis in each case will be the alliance (between Company A and an educational institution). The IT components (e.g., email, shared databases, and facsimiles) and the organizations will be embedded units (cases). Multiple relationships (cases) will be examined to provide case replication and a more compelling study (Yin 1994). Data will be collected through: interviews with individuals in the organizations; a survey instrument and documentation, to provide multiple sources of evidence.

The conceptual framework in Figure 1 will be used to examine and validate the propositions developed in the study. The primary mode of analysis for the case study will be pattern matching. Pattern matching entails examining the patterns of outcomes for the propositions of the dependent and independent variables derived from the research framework. The use of a pattern matching technique for analysis will provide a means for examining the variables in the case studies to determine whether patterns exist across them that can be used to establish analytic generalizations. Analytic generalization involves generalizing a particular set of results to a broader theory (Yin 1994). Identical results occurring over multiple cases will establish literal replication. Within each case, the embedded units will be analyzed and then each single-case study will be compared across cases to provide replication. The results of this will be used to draw conclusions about the study (Yin 1994).

Expected Results

It is expected the research will show that IT use in a collaboration for the outsourcing of IT management will impact the transparency and receptivity of the organizations. It is anticipated that higher levels of organizational transparency and receptivity will result from more use of IT. It is expected that the degree of organizational transparency and the degree of receptivity will be influenced by the intent, absorptive capacity and relative absorptive capacity of the partners, which will impact the level of interorganizational learning in the collaboration.

Limitations of the Study

Any research study has limitations on what the study can address in the scope of the research. A limitation of this research is that the findings of the study will be limited to the context of alliances formed for the outsourcing of IT services and management in higher education institutions. Providing outsourcing services for IT management in higher education institutions focuses on a subset of all such contracts; the results obtained from the in-depth analysis of this segment in the study therefore may not be generalizable to other industries.

Furthermore, the study will be focused on one company and its partnerships with its clients. Organizations have very different cultures in terms of the way in which they operate, and these may affect their ability to learn and implement new knowledge obtained from a partner in a collaboration. The study will not be taking into consideration organizational culture. A further limitation of the research is that interorganizational learning in a collaboration can be impacted by a number of other enablers such as: requisite variety (Nonaka 1994); redundancy (Webster 1989); autonomy (Nonaka 1994) and fluctuation (Nonaka 1994). Examination of these enablers provides areas for additional research and extensions to the study.

Contributions to Knowledge

Studying the relationships among organizations and clarifying the role that IT plays in interorganizational learning has several benefits for the practitioner:

- First, it brings an increased awareness of the value and role that IT plays in the development and transfer of organizational knowledge in external business relationships.
- Second, the study will assist organizations in understanding IT in terms of being an enabler or inhibitor in the transfer of knowledge in business alliances.
- Third, by providing information that can be used by organizations to expand their understanding of IT, organizations can take steps where necessary to deploy their IT in a manner that promotes the transfer of knowledge across organizational structures, or even to restrict access.

From a theoretical standpoint, this work will extend Scott's theory and framework by studying service-based collaborations (rather than value chain collaborations), which are especially important in today's economy and also include the non-profit sector. While Scott's theory and framework focus on the role of IT collaborations, the study will look at a richer set of variables. The research will provide an understanding of the correlation between the use of IT in a collaboration and interorganizational learning, and how IT may impact some of the enablers that might affect the ability of organizations to learn.

The theory and framework are important for researchers in a variety of disciplines including economics, organizational psychology, organizational behavior, and information science to examine collaborative relationships fully. Collaborative relationships are an important area of research because many organizations have to collaborate in order to meet the demands placed on them by their environment and to function most effectively. Collaborations occur in and across all segments of society in both private and public organizations. Lastly, in addition to extending Scott's theory, this research will augment the work performed by Hamel (1991), which looks at receptivity and transparency in alliances, by applying the variables to IT.

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